

BRUHAT BANAGLORE MAHANAGARA PALIKE									
Executive Engineer-Byatarayanapura Division									
Detailed Estimate									
Name of Work:Improvements and Asphaltting to Roads and Drains from Nagawara Junction to Thanisandra at Ward No. 06, Byatarayanapura Sub division									
			Estimate Amount :				25000000.00		
Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in M	Quantity	Rate in Rs	Total Amount in Rs
CIVIL WORKS									
1	KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 (Page No141., I.No.19.1 of KPWD S.R 2015-16).								
	RCC Drain	Cum							
	Tuba Layout Main road		1	146.00	1.10	1.00	160.60		
	Tuba layout Left Side Cross Road		2	88.50	1.10	1.00	194.70		
			1	50.00	1.10	1.00	55.00		
			1	26.00	1.10	1.00	28.60		
			1	13.70	1.10	1.00	15.07		
			1	19.00	1.10	1.00	20.90		
	Tuba Layout Min Road Left Side Cross Road		1	48.00	1.10	1.00	52.80		
	Tuba Layout Right Side Cross Roads		1	68.20	1.10	1.00	75.02		
			1	18.00	1.10	1.00	19.80		
	Tuba Layout Main Road to Masjid Road		1	14.50	1.10	1.00	15.95		
			1	75.70	1.10	1.00	83.27		
			1	65.40	1.10	1.00	71.94		
	Masjid Road		1	94.70	1.10	1.00	104.17		
	Thanisandra Main Road to Ring Road A2B Hotel		1	93.00	1.25	1.00	116.25		
	For Slab Drains								
	Tuba Layout Cross Road		2	40.50	0.75	0.75	45.56		
			1	52.00	0.75	0.75	29.25		
			1	38.70	0.75	0.75	21.77		
			1	15.20	0.75	0.75	8.55		
	Opp Ashwathkatte		1	81.10	0.75	0.75	45.62		
	For Culverts								
	Culvert-1		1	7.30	1.50	1.00	10.95		
	Culvert-2		1	11.00	1.50	1.00	16.50		
	Culvert-3		1	4.40	1.50	1.00	6.60		
	Culvert-4		1	5.90	1.50	1.00	8.85		
	Culvert-5		1	4.90	1.50	1.00	7.35		
	Culvert-6		1	4.90	1.50	1.00	7.35		
	Culvert-7		1	4.70	1.50	1.00	7.05		
	Culvert-8		1	5.20	1.50	1.00	7.80		
	Culvert-9		1	5.90	1.50	1.00	8.85		

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in M	Quantity	Rate in Rs	Total Amount in Rs
	Culvert-5		1	4.90	1.50	1.00	7.35		
	Culvert-6		1	4.90	1.50	1.00	7.35		
	Culvert-7		1	4.70	1.50	1.00	7.05		
	Culvert-8		1	5.20	1.50	1.00	7.80		
	Culvert-9		1	5.90	1.50	1.00	8.85		
	Culvert-10		1	5.30	1.50	1.00	7.95		
	Culvert-11		1	4.40	1.50	1.00	6.60		
	Culvert-12		1	6.10	1.50	1.00	9.15		
	Saraipalya Main Road Right Side Cross Roads		2	90.00	1.10	1.00	198.00		
	Cross Road		1	276.00	1.10	1.00	303.60		
	Desilting of drains								
	Saraipalya Main Road		2	550.00	0.50	0.30	165.00		
	From Sawmill Road to Saraipalya Main Road		2	180.00	0.40	0.30	43.20		
	From Sawmill road Junction to End of Ward Border		2	220.00	0.40	0.30	52.80		
	Both side Cross Roads towards Sawmill Road		6X2	80.00	0.40	0.30	115.20		
	Over burden Earth on both side of Road From CH. 414 to Ward Boundry		2	480.00	0.60	0.25	144.00		
	From Govt Hostle to Govt School Cross Roads		2	280.00	0.40	0.25	56.00		
	Saraipalya Cross roads		3X2	73.00	0.40	0.25	43.80		
						Total	2391.42	171.80	410846.00
2	Providing granite slabs of selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., complete. 10cm thick(Page No 25., I.No.5.31.2 of KPWD S.R 2015-16).								
		Sqm							
	For Slab Drains								
	Tuba Layout Cross Road		2	40.50	1.5		121.50		
			1	52.00	1.5		78.00		
			1	38.70	1.5		58.05		
			1	15.20	1.5		22.80		
			1	81.10	1.5		121.65		
							402.00	663.12	266575.00

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in M	Quantity	Rate in Rs	Total Amount in Rs
3	KSRB 4-1.2 : Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2 (Page No 12., I.No.4.2 of KPWD S.R 2015-16).								
	RCC Drain								
	Tuba Layout Main road		1	146.00	1.10	0.10	16.06		
	Tuba layout Left Side Cross Road		2	88.50	1.10	0.10	19.47		
			1	50.00	1.10	0.10	5.50		
			1	26.00	1.10	0.10	2.86		
			1	13.70	1.10	0.10	1.51		
			1	19.00	1.10	0.10	2.09		
	Tuba Layout Min Road Left Side Cross Road		1	48.00	1.10	0.10	5.28		
	Tuba Layout Right Side Cross Roads		1	68.20	1.10	0.10	7.50		
			1	18.00	1.10	0.10	1.98		
	Tuba Layout Main Road to Masjid Road		1	14.50	1.10	0.10	1.60		
			1	75.70	1.10	0.10	8.33		
			1	65.40	1.10	0.10	7.19		
	Masjid Road		1	94.70	1.10	0.10	10.42		
	Thanisandra Main Road to Ring Road A2B Hotel		1	93.00	1.25	0.10	11.63		
	For Culverts						0.00		
	Culvert-1		1	7.30	1.10	0.10	0.79		
	Culvert-2		1	11.00	1.10	0.15	1.80		
	Culvert-3		1	4.40	1.10	0.15	0.72		
	Culvert-4		1	5.90	1.10	0.15	0.97		
	Culvert-5		1	4.90	1.10	0.15	0.80		
	Culvert-6		1	4.90	1.10	0.15	0.80		
	Culvert-7		1	4.70	1.10	0.15	0.76		
	Culvert-8		1	5.20	1.10	0.15	0.86		
	Culvert-9		1	5.90	1.10	0.10	0.65		
	Culvert-10		1	5.30	1.10	0.10	0.58		
	Culvert-11		1	4.40	1.10	0.10	0.48		
	Culvert-12		1	6.10	1.10	0.10	0.67		
	Saraipalya Main Road Right Side Cross Roads		2	90.00	1.05	0.05	9.45		
	Cross Road		1	276.00	0.95	0.10	26.22		
		Cum					146.97	5236.92	769692.00

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in M	Quantity	Rate in Rs	Total Amount in Rs
4	Providing and laying Plain /reinforced cement concrete for Box drain walls of thickness 10cm to 20cm including centring shuttering for work etc. complete as per approved drawing and design MORTH specification No.1500,1700,2200 (Page No258., I.No.37.59.2 of KPWD S.R 2014-15).								
	RCC Drain Bottom Concrete								
	Tuba Layout Main road		1	146.00	1.10	0.15	24.09		
	Tuba layout Left Side Cross Road		2	88.50	1.10	0.15	29.21		
			1	50.00	1.10	0.15	8.25		
			1	26.00	1.10	0.15	4.29		
			1	13.70	1.10	0.15	2.26		
			1	19.00	1.10	0.15	3.14		
	Tuba Layout Min Road Left Side Cross Road		1	48.00	1.10	0.15	7.92		
	Tuba Layout Right Side Cross Roads		1	68.20	1.10	0.15	11.25		
			1	18.00	1.10	0.15	2.97		
	Tuba Layout Main Road to Masjid Road		1	14.50	1.10	0.15	2.39		
			1	75.70	1.10	0.15	12.49		
			1	65.40	1.10	0.15	10.79		
	Masjid Road		1	94.70	1.10	0.15	15.63		
	Thanisandra Main Road to Ring Road A2B Hotel		1	93.00	1.25	0.15	17.44		
	Saraipalya Main Road Right Side Cross Roads		2	90.00	1.05	0.15	28.35		
	Cross Road		1	276.00	0.95	0.15	39.33		
	For Culverts								
	Culvert-1		1	7.30	1.10	0.15	1.20		
	Culvert-2		1	11.00	1.10	0.15	1.82		
	Culvert-3		1	4.40	1.10	0.15	0.73		
	Culvert-4		1	5.90	1.10	0.15	0.97		
	Culvert-5		1	4.90	1.10	0.15	0.81		
	Culvert-6		1	4.90	1.10	0.15	0.81		
	Culvert-7		1	4.70	1.10	0.15	0.78		
	Culvert-8		1	5.20	1.10	0.15	0.86		
	Culvert-9		1	5.90	1.10	0.15	0.97		
	Culvert-10		1	5.30	1.10	0.15	0.87		
	Culvert-11		1	4.40	1.10	0.15	0.73		
	Culvert-12		1	6.10	1.10	0.15	1.01		
	RCC Drain Side Walls								
	Tuba Layout Main road		2	146.00	0.15	0.75	32.85		

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in M	Quantity	Rate in Rs	Total Amount in Rs
	Tuba layout Left Side Cross Road		4	88.50	0.15	0.75	39.83		
			2	50.00	0.15	0.75	11.25		
			2	26.00	0.15	0.75	5.85		
			2	13.70	0.15	0.75	3.08		
			2	19.00	0.15	0.75	4.28		
	Tuba Layout Min Road Left Side Cross Road		2	48.00	0.15	0.75	10.80		
	Tuba Layout Right Side Cross Roads		2	68.20	0.15	0.75	15.35		
			2	18.00	0.15	0.75	4.05		
	Tuba Layout Main Road to Masjid Road		2	14.50	0.15	0.75	3.26		
			2	75.70	0.15	0.75	17.03		
			2	65.40	0.15	0.75	14.72		
	Masjid Road		2	94.70	0.15	0.75	21.31		
	Thanisandra Main Road to Ring Road A2B Hotel		2	93.00	0.15	0.75	20.93		
	Thanisandra Main Road Left Side Cross Roads		2X2	90.00	0.15	0.75	40.50		
	Cross Road		2	276.00	0.15	0.75	62.10		
	For Culverts								
	Culvert-1		2	7.30	0.20	0.75	2.19		
	Culvert-2		2	11.00	0.20	0.75	3.30		
	Culvert-3		2	4.40	0.20	0.75	1.32		
	Culvert-4		2	5.90	0.20	0.75	1.77		
	Culvert-5		2	4.90	0.20	0.75	1.47		
	Culvert-6		2	4.90	0.20	0.75	1.47		
	Culvert-7		2	4.70	0.20	0.75	1.41		
	Culvert-8		2	5.20	0.20	0.75	1.56		
	Culvert-9		2	5.90	0.20	0.75	1.77		
	Culvert-10		2	5.30	0.20	0.75	1.59		
	Culvert-11		2	4.40	0.20	0.75	1.32		
	Culvert-12		2	6.10	0.20	0.75	1.83		
	For Vent concrete								
	Tuba Layout Main road		1	146.00	0.60	0.10	8.76		
	Tuba layout Left Side Cross Road		2	88.50	0.60	0.10	10.62		
			1	50.00	0.60	0.10	3.00		
			1	26.00	0.60	0.10	1.56		
			1	13.70	0.60	0.10	0.82		
			1	19.00	0.60	0.10	1.14		
	Tuba Layout Min Road Left Side Cross Road		1	48.00	0.60	0.10	2.88		

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in M	Quantity	Rate in Rs	Total Amount in Rs
	Tuba Layout Right Side Cross Roads		1	68.20	0.60	0.10	4.09		
			1	18.00	0.60	0.10	1.08		
	Tuba Layout Main Road to Masjid Road		1	14.50	0.60	0.10	0.87		
			1	75.70	0.60	0.10	4.54		
			1	65.40	0.60	0.10	3.92		
	Masjid Road		1	94.70	0.60	0.10	5.68		
	Thanisandra Main Road to Ring Road A2B Hotel		1	93.00	0.60	0.10	5.58		
	Saraipalya Main Road Right Side Cross Roads		2	90.00	0.60	0.10	10.80		
	Cross Road		1	276.00	0.60	0.10	16.56		
	For Culverts								
	Culvert-1		1	7.30	0.60	0.15	0.66		
	Culvert-2		1	11.00	0.60	0.15	0.99		
	Culvert-3		1	4.40	0.60	0.15	0.40		
	Culvert-4		1	5.90	0.60	0.15	0.53		
	Culvert-5		1	4.90	0.60	0.15	0.44		
	Culvert-6		1	4.90	0.60	0.15	0.44		
	Culvert-7		1	4.70	0.60	0.15	0.42		
	Culvert-8		1	5.20	0.60	0.15	0.47		
	Culvert-9		1	5.90	0.60	0.15	0.53		
	Culvert-10		1	5.30	0.60	0.15	0.48		
	Culvert-11		1	4.40	0.60	0.15	0.40		
	Culvert-12		1	6.10	0.60	0.15	0.55		
	For Culverts Deck Slabs								
	Culvert-1		1	7.30	1.20	0.25	2.20		
	Culvert-2		1	11.00	1.20	0.25	3.30		
	Culvert-4		1	5.90	1.20	0.25	1.77		
	Culvert-9		1	5.90	1.20	0.23	1.63		
	Culvert-10		1	5.30	1.20	0.23	1.46		
	Culvert-11		1	4.40	1.20	0.23	1.21		
	Culvert-12		1	6.10	1.20	0.23	1.68		
		Cum					660.98	6931.44	4581546.00
5	KSRB 4.9.2 : Providing T .M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 for TMT Bars Fe500 (Page No 17., I.No.4.46.2 of KPWD S.R 2014-15).								
	taking 60kg/cum		Qty Vide Itme No.4				39.66		
	Tonne						39.66	58229.24	2309303.00

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in M	Quantity	Rate in Rs	Total Amount in Rs
6	Providing precast slab of 100 mm thick including cost of all materials, labour, curing, transportation, loading, unloading, etc., complete as per the direction of engineer in charge- Data rate								
	RCC Drain								
	Tuba Layout Main road		1	146.00	0.90		131.40		
	Tuba layout Left Side Cross Road		2	88.50	0.90		159.30		
			1	50.00	0.90		45.00		
			1	26.00	0.90		23.40		
			1	13.70	0.90		12.33		
			1	19.00	0.90		17.10		
	Tuba Layout Min Road Left Side Cross Road		1	48.00	0.90		43.20		
	Tuba Layout Right Side Cross Roads		1	68.20	0.90		61.38		
			1	18.00	0.74		13.32		
	Tuba Layout Main Road to Masjid Road		1	14.50	0.90		13.05		
			1	75.70	0.90		68.13		
			1	65.40	0.90		58.86		
	Masjid Road		1	94.70	0.90		85.23		
	Thanisandra Main Road to Ring Road A2B Hotel		1	93.00	0.90		83.70		
	Saraipalya Main Road		1	315.00	0.90		283.50		
	Saraipalya Main Road Right Side Cross Roads		2	90.00	0.75		135.00		
	Cross Road		1	276.00	0.75		207.00		
		Sqm					1440.90	1834.00	2642611.00
7	Providing precast slab of 250mm thick including cost of all materials, labour, curing, transportation, loading, unloading, etc., complete as per the direction of engineer in charge- Data rate								
	For Culverts								
	Culvert-3		1	4.40	1.17		5.16		
	Culvert-5		1	4.90	1.20		5.88		
	Culvert-6		1	4.90	1.20		5.88		
	Culvert-7		1	4.70	1.20		5.64		
	Culvert-8		1	5.20	1.20		6.24		
		Sqm					28.80	5111.00	147180.00

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in M	Quantity	Rate in Rs	Total Amount in Rs
ROAD WORKS									
8	KSRRB M300-14. Excavation for roadwork in all type of soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location to a lead of 1.00 km and complete as per specifications. MORTH Specification No.301 (Page No 142., I.No.19.14 of KPWD S.R 2015-16).								
		Cum							
	New Formation for Concrete Road								
	Saraipalya								
	main Road Left Side Cross Roads		1	47.20	3.40	0.25	40.12		
			1	37.00	3.25	0.25	30.06		
			1	38.00	2.90	0.25	27.55		
	Muninarayanappa Layout Main Road Left Side Cross Roads		1	90.00	5.00	0.25	112.50		
			1	60.00	5.00	0.25	75.00		
			1	72.00	4.50	0.25	81.00		
			1	60.00	4.50	0.25	67.50		
			1	72.00	5.50	0.25	99.00		
			1	70.50	4.00	0.25	70.50		
			1	67.00	4.50	0.25	75.38		
	Shiva Temple Road		1	36.50	4.00	0.25	36.50		
			1	38.00	4.00	0.25	38.00		
			1	61.00	4.50	0.25	68.63		
	Venkateshappa House Road		1	43.00	4.50	0.23	43.54		
			1	27.00	4.00	0.23	24.30		
			1	50.00	4.50	0.23	50.63		
	Tuba Layout Left Side Cross Roads		1	38.70	5.00	0.23	43.54		
			1	15.20	5.00	0.23	17.10		
	Tuba Layout Masjid Road		1	65.40	5.00	0.23	73.58		
			1	40.50	5.00	0.23	45.56		
			1	43.00	5.00	0.23	48.38		
			1	46.50	5.00	0.23	52.31		
	Thanisandra Main Road to 3rd Cross Connecting Road		1	161.00	5.50	0.23	199.24		
	For Asphalt Road								
	Saraipalya main Road to Govt School		1	253.00	8.00	0.25	506.00		
	Masjid Road		1	90.00	4.50	0.25	101.25		
	Tuba Layout Main Road to Masjid		1	109.00	5.00	0.25	136.25		

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in M	Quantity	Rate in Rs	Total Amount in Rs
	Saraipalya Main Road Right Side Cross Roads		1	100.00	5.50	0.30	165.00		
	Sawmill Road to saraipalya Main Road		1	90.00	6.00	0.30	162.00		
	Over burden Earth Removing		1	40.00	1.50	0.35	21.00		
			1	25.00	1.80	0.30	13.50		
			1	30.00	2.00	0.35	21.00		
			1	19.00	2.64	0.30	15.05		
							2560.95	137.24	351465.00
9	KSRRB 300-58. Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occurring during rolling including cost of all labour, HOM of machinery complete as per specifications. MORTH / Chapter 3 (Page No 148., I.No.19.64 of KPWD S.R 2015-16).								
		Sqm							
	New Formation for Concrete Road								
	Saraipalya								
	main Road Left Side Cross Roads		1	47.20	3.40		160.48		
			1	37.00	3.25		120.25		
			1	38.00	2.91		110.70		
	Muninarayanappa Layout Main Road Left Side Cross Roads		1	90.00	5.00		450.00		
			1	60.00	4.50		270.00		
			1	72.00	4.50		324.00		
			1	60.00	4.50		270.00		
			1	72.00	3.00		216.00		
			1	70.50	4.00		282.00		
			1	38.00	3.90		148.20		
			1	61.00	5.00		305.00		
	Thanisandra Main Road to 3rd Cross Connecting Road		1	161.00	5.50		885.50		
	For Asphalt Road								
	Saraipalya main Road to Govt School		1	414.00	8.00		3712.00		
	Masjid Road		1	90.00	4.50		495.37		
	Tuba Layout Main Road to Masjid		1	109.00	5.00		550.00		
						Total	8299.50	4.86	40336.00
10	KSRRB M400-6.1. Construction of granular sub-base by providing close graded material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. A. Plant Mix Method. Close graded granular sub-base material as per 400-1 For Grading II Material (Page No 154., I.No.20.4.2 of KPWD S.R 2015-16).								

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in M	Quantity	Rate in Rs	Total Amount in Rs
		Cum							
	New Formation for Concrete Road								
	Saraipalya								
	main Road Left Side Cross Roads		1	47.20	3.40	0.10	16.05		
			1	37.00	3.25	0.10	12.03		
			1	38.00	2.90	0.15	16.53		
	Muninarayanappa Layout Main Road Left Side Cross Roads		1	34.80	5.00	0.10	17.40		
			1	62.00	4.50	0.10	27.90		
			1	60.00	4.50	0.10	27.00		
			1	72.00	5.50	0.10	39.60		
			1	70.50	4.00	0.10	28.20		
			1	67.00	4.50	0.10	30.15		
	Shiva Temple Road		1	36.50	4.00	0.10	14.60		
			1	38.00	4.00	0.10	15.20		
			1	61.00	4.50	0.10	27.45		
	Venkateshappa House Road		1	43.00	4.50	0.15	29.03		
			1	27.00	4.00	0.15	16.20		
			1	50.00	4.50	0.15	33.75		
	Tuba Layout Left Side Cross Roads		1	38.70	5.00	0.15	29.03		
			1	15.20	5.00	0.12	9.20		
	Tuba Layout Masjid Road		1	65.40	5.00	0.15	49.05		
			1	40.50	5.00	0.15	30.38		
			1	43.00	5.00	0.10	21.50		
			1	46.50	5.00	0.10	23.25		
	Thanisandra Main Road to 3rd Cross Connecting Road		1	161.00	5.50	0.10	88.55		
	For Asphalt Road								
	Saraipalya main Road to Govt School		1	414.00	8.00	0.20	662.40		
	Masjid Road		1	90.00	4.50	0.15	60.75		
	Tuba Layout Main Road to Masjid		1	109.00	5.00	0.15	81.75		
							1406.93	1622.16	2282268.16
11	KSRRB M600- Cement concrete Pavements KSRRB M600-1. Construction of dry lean cement concrete mix CC 1:5:10 with OPC cement @160Kgs, with 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @ 0.58cum Sub- base over a prepared sub-grade with coarse and fine aggregate conforming to IS: 383, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per Table 600-1, cement content not to be less than 160 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. MORTH Specification No. 601(Page No 170., I.No.22.1 of KPWD S.R 2014-15).								

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in M	Quantity	Rate in Rs	Total Amount in Rs
		Cum							
	New Formation for Concrete Road								
	Saraipalya								
	main Road Left Side Cross Roads		1	47.20	3.40	0.08	12.04		
			1	37.00	3.25	0.08	9.02		
			1	38.00	2.90	0.08	8.27		
	Muninarayanappa Layout Main Road Left Side Cross Roads		1	34.80	5.00	0.08	13.05		
			1	62.00	4.50	0.08	20.93		
			1	60.00	4.50	0.08	20.25		
			1	72.00	5.50	0.08	29.70		
			1	70.50	4.00	0.08	21.15		
			1	67.00	4.50	0.08	22.61		
	Shiva Temple Road		1	36.50	4.00	0.08	10.95		
			1	38.00	4.00	0.08	11.40		
			1	61.00	4.50	0.08	20.59		
	Venkateshappa House Road		1	43.00	4.50	0.08	14.51		
			1	27.00	4.00	0.07	7.89		
			1	50.00	4.50	0.08	16.88		
	Tuba Layout Left Side Cross Roads		1	38.70	5.00	0.08	14.51		
			1	15.20	5.00	0.08	5.70		
	Tuba Layout Masjid Road		1	65.40	5.00	0.08	24.53		
			1	40.50	5.00	0.08	15.19		
			1	43.00	5.00	0.08	16.13		
			1	46.50	5.00	0.08	17.44		
	Thanisandra Main Road to 3rd Cross Connecting Road		1	161.00	5.50	0.08	66.41		
							399.13	3900.96	1556978.66
12	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement , thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregates , with superplasticiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rammers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. M30 (at 360Kg per cum coarse aggregate @ 0.64cum and fine aggregate @ 0.46cum (Page No 171., I.No.22.6.1 of KPWD S.R 2014-15)).								

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in M	Quantity	Rate in Rs	Total Amount in Rs
		Cum							
	New Formation for Concrete Road								
	Saraipalya								
	main Road Left Side Cross Roads		1	47.20	3.40	0.15	24.07		
			1	37.00	3.25	0.15	18.04		
			1	38.00	2.90	0.15	16.53		
	Muninarayanappa Layout Main Road Left Side Cross Roads		1	34.80	5.00	0.15	26.10		
			1	62.00	4.50	0.15	41.85		
			1	60.00	4.50	0.15	40.50		
			1	72.00	5.50	0.15	59.40		
			1	70.50	4.00	0.15	42.30		
			1	67.00	4.50	0.15	45.23		
	Shiva Temple Road		1	36.50	4.00	0.15	21.90		
			1	38.00	4.00	0.15	22.80		
			1	61.00	4.50	0.15	41.18		
	Venkateshappa House Road		1	43.00	4.50	0.15	29.03		
			1	27.00	4.00	0.15	15.78		
			1	50.00	4.50	0.15	33.75		
	Tuba Layout Left Side Cross Roads		1	38.70	5.00	0.15	29.03		
	Cross		1	15.20	5.00	0.15	11.40		
	Tuba Layout Masjid Road		1	65.40	5.00	0.15	49.05		
			1	40.50	5.00	0.15	30.38		
			1	43.00	5.00	0.15	32.25		
			1	46.50	5.00	0.15	34.88		
	Thanisandra Main Road to 3rd Cross Connecting Road		1	161.00	5.50	0.15	132.83		
	CC Over lay								
	Muninarayanappa Layout Main Road Right Side Cross Road		1	133.50	5.50	0.10	73.43		
	Cross Road		1	15.20	4.00	0.15	9.12		
							880.79	5957.28	5247102.52
13	Providing groove cutting for Concrete pavement width of 5mm to 10mm and depth 80mm- 100mm including cost of cutting machine, generator & HOM of machinery, including cost of blade,coolant etc., including cleaning of groove & providing sand and hot bitumen fillars, and filler metal etc., including cost of conveyance of all materials, labour, lead and lift charges and all other incidental charges as per drawing and as per specifications.(Page No 172., I.No.22.8 of KPWD S.R 2014-15).								
		Rmt							
	New Formation for Concrete Road								
	Saraipalya								
	main Road Left Side Cross Roads		1	47.20			47.20		

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in M	Quantity	Rate in Rs	Total Amount in Rs
			1	37.00			37.00		
			1	38.00			38.00		
	Muninarayanappa Layout Main Road		1	34.80			34.80		
			1	62.00			62.00		
			1	60.00			60.00		
			1	72.00			72.00		
			1	70.50			70.50		
			1	67.00			67.00		
	Shiva Temple Road		1	36.50			36.50		
			1	38.00			38.00		
			1	61.00			61.00		
	Venkateshappa House Road		1	43.00			43.00		
			1	27.00			27.00		
			1	50.00			50.00		
	Tuba Layout Left Side Cross Roads		1	38.70			38.70		
			1	15.20			15.20		
	Tuba Layout Masjid Road		1	65.40			65.40		
			1	40.50			40.50		
			1	43.00			43.00		
			1	46.50			46.50		
	Thanisandra Main Road to 3rd Cross Connecting Road		1	161.00			161.00		
	for Concrete Road		11	3.40			37.76		
	Saraipalya		9	3.25			28.29		
	main Road Left Side Cross Roads		10	2.90			29.00		
			8	5.00			40.94		
			15	4.50			65.65		
	Muninarayanappa Layout Main Road Left Side Cross Roads		14	4.50			63.53		
			17	5.50			93.18		
			17	4.00			66.35		
			16	4.50			70.94		
			9	4.00			34.35		
			9	4.00			35.76		
	Shiva Temple Road		14	4.50			64.59		
			31	5.00			157.06		
			10	3.50			34.59		
	Venkateshappa House Road		8	3.50			28.00		
			9	4.50			40.98		
			4	4.50			16.09		

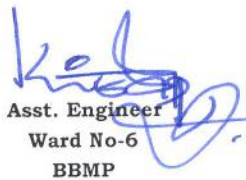
Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in M	Quantity	Rate in Rs	Total Amount in Rs
	Tuba Layout Left Side Cross Roads		11	5.00			55.00		
			10	4.50			42.88		
			11	4.50			49.50		
	Tuba Layout Masjid Road		11	5.00			54.71		
			14	5.50			77.00		
							2339.90	124.20	290615.58
14	KSRRB M400-17. Providing, laying, spreading and compacting graded stones aggregate to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 (Page No 157., I.No.20.18 of KPWD S.R 2015-16).								
		Cum							
	Saraipalya main Road to Govt School		1	253.00	7.50	0.20	379.50		
	Masjid Road		1	90.00	4.50	0.15	60.75		
	Tuba Layout Main Road to Masjid		1	109.00	4.50	0.15	73.08		
	Saraipalya Main Road Right Side Cross Roads		1	100.00	5.50	0.15	82.50		
			1	90.00	5.50	0.15	74.25		
							670.01	1713.96	1148370.34
15	KSRRB M500-6. Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WBM,WMM ,including clearing of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per Specifications. MORTH Specification No. 502 (Page No 160., I.No.21.6 of KPWD S.R 2015-16).								
		Cum							
	Saraipalya main Road to Govt School		1	256.00	7.55		1932.80		
	Saraipalya Main Road Right Side Cross Roads		1	100.00	5.50		550.00		
			1	90.00	5.50		495.00		
							2977.80	32.40	96480.72
16	KSRRB 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH / Chapter 5(Page No 160., I.No.21.2 of KPWD S.R 2015-16).								
		Cum							
	Saraipalya main Road to Govt School Existing Surface		1	239.00	7.01		1675.50		
							1675.50	3.24	5428.64

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in M	Quantity	Rate in Rs	Total Amount in Rs
17	KSRRB 500-7. Providing and applying tack coat using 80/100 grade Bitumen (VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm , heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH/Chapter 5 (Page No 160., I.No.21.7 of KPWD S.R 2015-16).								
		Cum							
	Saraipalya main Road to Govt School		1	414.00	7.50		3105.00		
	Masjid Road		1	90.00	4.50		405.00		
	Tuba Layout Main Road to Masjid		1	109.00	5.00		545.00		
			1	115.00	5.20		598.30		
							4653.30	11.88	55281.19
18	KSRRB M500- 15. Providing, laying dense graded bituminous macadam using 40/60 THP capacity H.M.P with Mechanical paver Gr-II(50mm to 75mm), crushed aggregates of specified grading premixed with 4.5% VG 30 grade bituminous binder and , transporting the hot mix to work site , laying to the required level and grade, rolling with wheeled , vibratory and tandem rollers to achieve the desired density including all leads and lift cost of all materials, labour, HOM of machineries complete as per specifications MORTH Specification No.507 (Page No 161., I.No.21.17.6 of KPWD S.R 2015-16).								
		Cum							
	Saraipalya main Road to Govt School		1	253.00	7.50	0.05	94.88		
	Tuba Layout Left Side Cross Road		1	109.00	4.50	0.05	24.53		
	Saraipalya Main Road Right Side Cross Roads		1	100.00	4.50	0.05	22.50		
			1	90.00	4.50	0.05	20.25		
							161.46	6366.60	1027951.24
19	KSRRB M500- 15. Providing, laying bituminousConcrete using 40/60 THP capacity H.M.P with Mechanical paver Gr-II(30mm to 45mm), crushed aggregates of specified grading premixed with 6% VG 30 grade bituminous binder and , transporting the hot mix to work site , laying to the required level and grade, rolling with wheeled , vibratory and tandem rollers to achieve the desired density including all leads and lift cost of all materials, labour, HOM of machineries complete as per specifications MORTH Specification No.509 (Page No 164., I.No.21.22.6 of KPWD S.R 2015-16).								
		Cum							
	Saraipalya main Road to Govt School		1	414.00	7.50	0.04	124.20		
	Masjid Road		1	90.00	4.50	0.04	16.20		
	Tuba Layout Main Road to Masjid		1	109.00	5.00	0.04	21.80		
	Saraipalya Main Road Right Side Cross Roads		1	100.00	4.50	0.03	13.20		
			1	90.00	4.50	0.03	12.15		
							187.55	7699.32	1444007.47

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in M	Quantity	Rate in Rs	Total Amount in Rs
ROAD FURNITURES									
20	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 (Page No 181., I.No.24.15 of KPWD S.R 2015-16).								
		Sqm							
	Saraipalya main Road to Govt School		2	414.00	0.1		82.80		
	Masjid Road		2	90.00	0.1		18.00		
	Saraipalya Main Road Right Side Cross Roads		2	100.00	0.1		20.00		
			2	90.00	0.1		18.00		
			2	85.00	0.1		17.00		
							155.80	473.04	73699.63
	Sub Total								24747738.15
21	For 1% PMC/Third party inspection charges								247477.38
22	Miscellaneous and other charges								4784.47
	Grand Total								25000000.00

Certificate:-

1. That the workspot inspected by me and found work is necessary.
2. That the area comes with in the Bruhat Bangalore Mahanagara Palike Limits.
3. That the rates are adopted based on the PWD SR of 2015-16
4. That the provisions made in the estimate are necessary and quite essential.


 Asst. Engineer
 Ward No-6
 BBMP


 AEE
 Byatarayanapura Sub Division
 BBMP


 Executive Engineer
 Byatarayanapura Division
 BBMP

ADMINISTRATIVE APPROVAL

Accorded For Rs. Two crores Fifty lakhs only

Head of A/c. P-3075

Div. Ref. No. 40/1677 Date 27/08/2016


 AE


 EE(BTP)

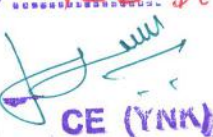
Technical Sanction

Accorded For 250.00 lakhs Rs.

Head of A/c. P-3075

CER NO : 136 Dt 16-03-16


 TA


 CE (YNA)